

WHAT IS CLAIMED IS:

1. An image sensing apparatus comprising:  
first image sensing unit adapted to sense a first direction;  
5 second image sensing unit adapted to sense a second direction;  
first view control unit adapted to control a view of said first image sensing unit to a first view different from that view; and  
10 second view control unit adapted to control a view of said second image sensing unit to a second view adjacent to the first view in a horizontal plane,  
wherein said first and second view control units do not share ridge lines with each other, and a lens  
15 center of virtual image sensing unit having the first view approximately matches a lens center of virtual image sensing unit having the second view.
2. The apparatus according to claim 1, wherein said  
20 second image sensing unit is arranged near a position opposing said first image sensing unit, and said second image sensing unit senses a direction opposite to the direction sensed by said first image sensing unit.
- 25 3. The apparatus according to claim 1, wherein said second image sensing unit is arranged at a position separated a predetermined distance from a position of

said first image sensing unit in a direction  
approximately parallel to the direction sensed by said  
first image sensing unit, said first and second image  
sensing units sense that direction, and said second  
5 view control unit is arranged at a position separated  
the predetermined distance from a position of said  
first view control unit in that direction.

4. The apparatus according to claim 1, wherein said  
10 first and second view control units comprise mirrors.

5. The apparatus according to claim 1, further  
comprising:

image recording unit adapted to record images  
15 sensed by said first and second image sensing units;  
synchronization signal generation unit adapted to  
output a synchronization signal, with which said first  
and second image sensing units operate synchronously;  
and

20 code appending unit adapted to append a code  
common to each predetermined timing to the images  
sensed by said first and second image sensing units.

6. The apparatus according to claim 5, wherein the  
25 code includes a sensing time of an image.

7. The apparatus according to claim 5, wherein the code includes a sensing position of an image.

8. The apparatus according to claim 5, further comprising:

generation unit adapted to generate an image viewed from an approximately matched viewpoint position by joining the images, which are recorded in said image recording unit and are appended with the common code, in accordance with positions and postures of said first and second image sensing units and said first and second view control units, which are measured in advance.

9. The apparatus according to claim 1, wherein said first and second image sensing units comprise cameras, which sense either a still image or a moving image.

10. A method of controlling an image sensing apparatus, comprising:

a step of sensing a first direction using first image sensing unit;

a step of sensing a second direction using second image sensing unit;

a step of controlling a view of the first image sensing unit to a first view different from that view using first view control means; and

a step of controlling a view of the second image sensing unit to a second view adjacent to the first view in a horizontal plane using second view control means,

- 5            wherein the first and second view control units do not share ridge lines with each other, and a lens center of virtual image sensing unit having the first view approximately matches a lens center of virtual image sensing unit having the second view.

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